



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0271; Product Identifier 2017-NM-111-AD;

Amendment 39-19396; AD 2018-18-17]

RIN 2120-AA64

Airworthiness Directives; Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2016-13-06, which applied to certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes. AD 2016-13-06 required a revision of the applicable airplane flight manual (AFM), repetitive inspections of the horizontal stabilizer de-icing boots, and applicable corrective actions. This AD continues to require a revision of the applicable AFM, repetitive inspections of the horizontal stabilizer de-icing boots, and applicable corrective actions. This AD also requires replacement of single stitched de-icing boots with improved double stitched boots, and re-identification of the modified horizontal stabilizer leading edge. This AD was prompted by reports of ruptured horizontal stabilizer de-icing boots. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of August 1, 2016 (81 FR 41432, June 27, 2016).

ADDRESSES: For service information identified in this final rule, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; phone: +46 13 18 5591; fax: +46 13 18 4874; email: saab340techsupport@saabgroup.com; Internet: <http://www.saabgroup.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0271.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0271; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone:

800-647-5527) is Docket Operations, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-13-06, Amendment 39-18570 (81 FR 41432, June 27, 2016) (“AD 2016-13-06”). AD 2016-13-06 applied to certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes. The NPRM published in the Federal Register on April 17, 2018 (83 FR 16792). The NPRM was prompted by reports of ruptured horizontal stabilizer de-icing boots. The NPRM proposed to continue to require a revision of the applicable AFM, repetitive inspections of the horizontal stabilizer de-icing boots, and applicable corrective actions. The NPRM also proposed to require replacement of single stitched de-icing boots with improved double stitched boots, and re-identification of the modified horizontal stabilizer leading edge. We are issuing this AD to detect and correct ruptured horizontal stabilizer de-icing boots, which could lead to complete loss of the de-icing function within its associated zone and severe vibrations, possibly resulting in reduced control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0144, dated August 9, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes. The MCAI states:

Several occurrences were reported of rupture of the horizontal stabilizer de-icing boot in flight. In some of the reported events, the de-icing boot had formed a large open scoop.

This condition, if not detected and corrected, could lead to complete loss of the de-icing function within its associated zone and severe vibrations, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Saab AB, Aeronautics (hereafter referred to as “Saab” in this [EASA] AD) issued Alert Operations Bulletin (AOB) No. 12 and AOB No. 23 as temporary measures, recommending to select Flaps 0 for landing in the event of a suspected rupture of the deicing boot on the horizontal stabilizer. In addition, Saab issued SB [Service Bulletin] 340-30-094 providing instructions for inspection of de-icing boots.

Consequently, EASA issued AD 2015-0129 [which corresponds to FAA AD 2016-13-06] to require amendment of the applicable Aircraft Flight Manual (AFM), repetitive inspections of the horizontal stabilizer deicing boots and, depending on findings, accomplishment of applicable corrective action(s).

Since that [EASA] AD was issued, Saab developed an improved de-icing boot, reinforced through double stitch lines, and issued SB 340–30–095 providing instructions for boot replacement.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2015-0129, which is superseded, and requires replacement of single stitched deicing boots, installed on the left-hand (LH) and right-

hand (RH) horizontal stabilizer, with improved double stitched boots, and reidentification of the modified horizontal stabilizer leading edge.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0271.

Comments

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Saab AB, Saab Aeronautics has issued the following service information.

- Service Bulletin 340-30-094, dated March 27, 2015. This service information describes procedures for repetitive detailed inspections of the de-icing boots installed on the horizontal stabilizers, and repair and replacement of damaged de-icing boots.
- Service Bulletin 340-30-095, dated April 3, 2017. This service information describes procedures for replacement of single stitched de-icing boots with improved

double stitched boots, and re-identification of the modified horizontal stabilizer leading edge.

Saab AB, Saab Aeronautics has also issued the following AFMs, which describe performance limitations and general data. These AFMs are distinct since they apply to different airplane models in different configurations.

- AFM 340A 001, Revision 57, dated March 27, 2015.
- AFM 340B 001, Revision 35, dated March 27, 2015.
- AFM 340B 010, Revision 28, dated March 27, 2015.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 51 airplanes of U.S. registry.

The actions required by AD 2016-13-06, and retained in this AD take about 6 work-hours per product, at an average labor rate of \$85 per workhour. Based on these figures, the estimated cost of the actions that are required by AD 2016-13-06 is \$510 per product.

In addition, we estimate that any necessary follow-on actions required by AD 2016-13-06, and retained in this AD take about 6 work-hours and require parts costing \$9,500, for a cost of \$10,010 per product. We have no way of determining the number of aircraft that might need these actions.

We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$13,500 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$714,510, or \$14,010 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2016-13-06, Amendment 39-18570 (81 FR 41432, June 27, 2016), and adding the following new AD:

2018-18-17 Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems): Amendment 39-19396; Docket No. FAA-2018-0271; Product Identifier 2017-NM-111-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2016-13-06, Amendment 39-18570 (81 FR 41432, June 27, 2016) (“AD 2016-13-06”).

(c) Applicability

This AD applies to Saab AB, Saab Aeronautics (Type Certificate Previously Held by Saab AB, Saab Aerosystems) airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, serial numbers (S/Ns) 004 through 138 inclusive, on which Saab Modification 1462 has been embodied in production, or Saab Service Bulletin 340-55-008 has been embodied in service, except those on which Saab Modification 1793 has also been embodied in production, or Saab Service Bulletin 340-55-010 has been embodied in service; and Saab

AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, S/Ns 139 through 159 inclusive.

(2) Saab AB, Saab Aeronautics Model SAAB 340B airplanes, S/Ns 160 through 459 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and Rain Protection.

(e) Reason

This AD was prompted by reports of ruptured horizontal stabilizer de-icing boots. We are issuing this AD to detect and correct ruptured horizontal stabilizer de-icing boots, which could lead to complete loss of the deicing function within its associated zone and severe vibrations, possibly resulting in reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Revision of the Airplane Flight Manual (AFM), With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2016-13-06, with no changes. Within 30 days after August 1, 2016 (the effective date of AD 2016-13-06), revise the “Abnormal Procedures” section of the applicable Saab 340 AFM to incorporate the revision specified in paragraphs (g)(1) through (g)(3) of this AD.

(1) For Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, revise Saab AFM 340A 001 by incorporating Revision 57, dated March 27, 2015.

(2) For Saab AB, Saab Aeronautics Model SAAB 340B airplanes, revise Saab AFM 340B 001 by incorporating Revision 35, dated March 27, 2015.

(3) For Saab AB, Saab Aeronautics Model SAAB 340B airplanes with extended wing tips, revise Saab AFM 340B 010 by incorporating Revision 28, dated March 27, 2015.

(h) Retained Inspection/Replacement, With No Changes

This paragraph restates the requirements of paragraph (h) of AD 2016-13-06, with no changes. Within 400 flight hours or 6 months, whichever occurs first after August 1, 2016 (the effective date of AD 2016-13-06), do a detailed inspection for damage of the horizontal stabilizer de-icing boots, and existing repairs of horizontal stabilizer de-icing boots, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-30-094, dated March 27, 2015. Repeat the inspection thereafter at intervals not to exceed 400 flight hours. If, during any inspection required by this paragraph, any damage or existing repair outside the limits specified in Saab Service Bulletin 340-30-094, dated March 27, 2015, is found, before further flight, repair or replace the horizontal stabilizer de-icing boots, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-30-094, dated March 27, 2015. Repair or replacement on an airplane of the horizontal stabilizer de-icing boots, as required by this paragraph, does not constitute terminating action for the repetitive inspections required by this paragraph for that airplane.

(i) New Requirement of this AD: Modification

Within 18 months after the effective date of this AD, modify the airplane by replacing the single stitched de-icing boots installed on the left-hand (LH) and right-hand (RH) horizontal stabilizers with double stitched de-icing boots and re-identify the LH and

RH horizontal stabilizer leading edge, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-30-095, dated April 3, 2017.

(j) Terminating Action for the Requirements of Paragraph (h) of this AD

Modification of an airplane as required by paragraph (i) of this AD, constitutes terminating action for the repetitive inspections required by paragraph (h) of this AD, for that airplane.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or

Saab AB, Saab Aeronautics' EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0144, dated August 9, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0271.

(2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Saab Service Bulletin 340-30-095, dated April 3, 2017.

(ii) Reserved.

(4) The following service information was approved for IBR on August 1, 2016 (81 FR 41432, June 27, 2016).

(i) Saab Service Bulletin 340-30-094, dated March 27, 2015.

(ii) Saab AFM 340A 001, Revision 57, dated March 27, 2015.

(iii) Saab AFM 340B 001, Revision 35, dated March 27, 2015.

(iv) Saab AFM 340B 010, Revision 28, dated March 27, 2015.

(5) For service information identified in this AD, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; phone: +46 13 18 5591; fax: +46 13 18 4874; email: saab340techsupport@saabgroup.com; Internet: <http://www.saabgroup.com>.

(6) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on August 23, 2018.

James Cashdollar,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

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